

S. N. PANDEY* & A. K. TRIPATHI** : A new species
of *Nostoc* from India

S. N. パンデイ*・A. K. トリパティ** : インド産
ネンジュモ属の一新種

During 1979-80 algal collections were made in different temporary and permanent water accumulations around the district Unnao (2.48°N×90.43°E at about 130 m above sea level) of Uttar Pradesh state. The collections are deposited in the Botany Department (Applied Phycology Section), D. A-V. College, Kanpur. During the course of identification of the collections with the help of literature (Geitler 1932, Desikachary 1959) one taxon (under sample C₁₀) turned out to be new to science, which is described here in detail with illustrations to facilitate easy identification.

Nostoc unnaoense Pandey et Tripathi, sp. nov.

Thallus mucilaginosus vel gelatinus, aliquantum globosus, discretus, laete venetus vel incoloratus; fila longa flexuosa, laxe intricata, vagina absenti; trichoma 5.4-6.3 μ m latum, venetum, constrictum ad septum; cellulae cylindratae, 4.5-6.3 μ m longae; heterocystae intercalares, sphaericae, 3.6-6.3 μ m diam.; sporae sphaericae vel subsphaericae, 5.4-8.1 μ m diam., generaliter cateniformes tri- vel tetra-sporarum; episporae laevigatae, hyalinae.

Iconotypus: Figura 1.

Distributio: India: Uttar Pradesh, Unnao.

It comes closer to *Nostoc piscinale* Kützinger ex Borne et Flah. in the following respects, 1) dimensions of the trichome and 2) shape of heterocysts and spore, but differs in possessing 1) sheath absent, 2) vegetative cells cylindrical, 3) spores more in diameter and 4) spores generally not in long chains.

The specific epithet has been given after the place of collection of the species

The present new species has a set of certain characters and which made it a distinctly different taxon. The features include cylindrical cells with

* Botany Department, D. A-V. College, Kanpur-208 001, India.

** Botanical Survey of India, Central Circle, Allahabad-211 002, India.

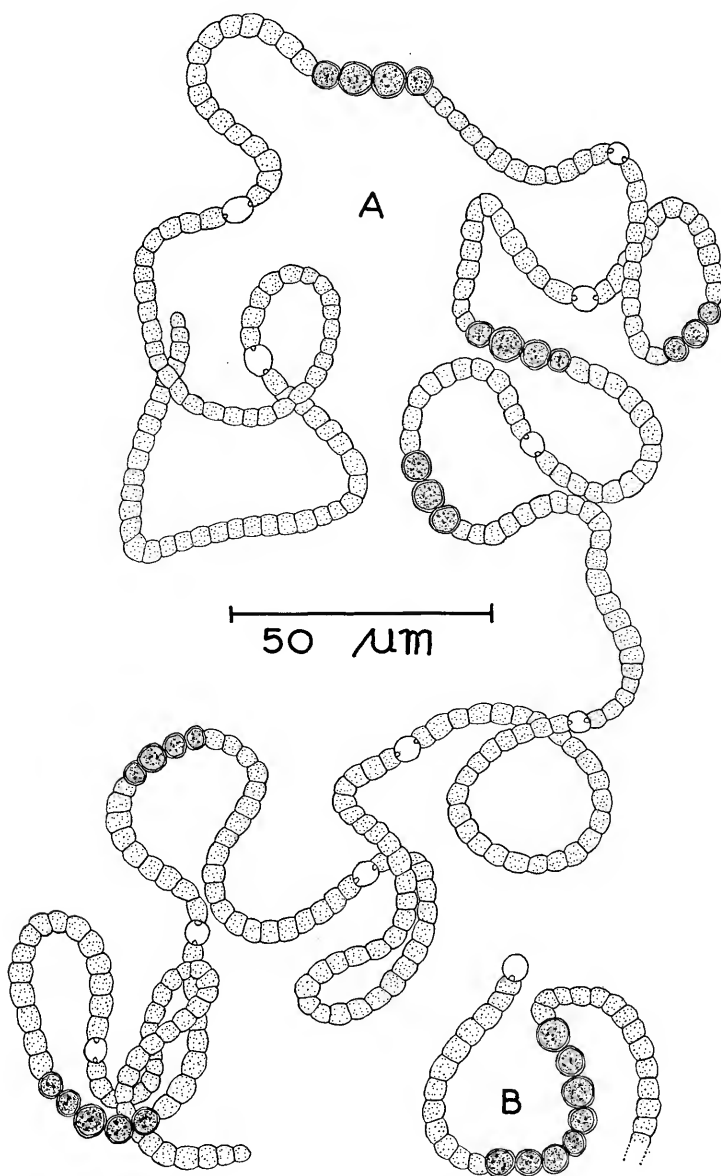


Fig. 1. *Nostoc unnaoense* Pandey et Tripathi, sp. nov.

spherical or subspherical heterocysts and spores. The distribution of spores in filaments is very characteristic in the present alga. Spores usually in chains of 3-4, occasionally upto 8 were always found remote from the heterocysts. Spores in most species of the genus *Nostoc* are found usually in longer chains (Geitler 1932, Desikachary 1959).

Authors thank the Principal, D.A.V. College, Kanpur for necessary research facilities and to Dr. G.L. Tiwari, Botany Department, Allahabad University, Allahabad for kindly going through the manuscript and fruitful suggestions. Authors also thank Dr. N.P. Balakrishnan, Scientist 'D', Flora Cell, Botanical Survey of India, Department of Environment, New Delhi for Latin transcription.

References

- Desikachary, T. V. 1959. *Cyanophyta*. I. C. A. R. p. 686. New Delhi. Geitler, L. 1932. Cyanophyceae in Rabenhorst's Kryptogamenflora, 14, p. 1196. Leipzig.

* * * *

インドの Uttar Pradesh 州より藍藻ネンジュモ属の一新種を記載した。 *Nostoc unaoense* Pandey et Tripathi, sp. nov. は細胞糸の太さ、異形細胞と胞子の形が *N. piscinale* と似るが、鞘を欠くこと、栄養細胞が円柱状であること、胞子が大きいことおよび一般に胞子は異形細胞から離れてでき、長い鎖状に形成されないことなどで区別できる。

□倉田 悟・中池敏之(編): 日本のシダ植物図鑑—5 816pp. 1987. 東京大学出版会. ¥14,000. 第1巻が1979年に出て(本誌 54: 378 紹介)確実に1年おきに出版された。各巻100種類を収めこの巻で500種類に達した(8巻まで予定)。この成功は「日本シダの会」全国多数の有志の方々による採集・標本製作・整理・作図・記録など熱心な奉仕と、(倉田氏没後)中池氏の適切な指導によるものと思われる。内容は1種類ごとの分布図とその元になった証拠標本(これなしには図上に点が打てない約束、全巻完成後国立科学博物館へ寄贈される由)のデータの表が主で、それに生態写真・線画・説明文などがついている。A4判の大形で紙質も印刷もよく極めて鮮明である。(伊藤 洋)